



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/723,118	11/26/2003	David R. Oran	2705-0311	1344
73552	7590	07/06/2009		
Stolowitz Ford Cowger LLP 621 SW Morrison St Suite 600 Portland, OR 97205			EXAMINER	
			YUEN, KAN	
			ART UNIT	PAPER NUMBER
			2416	
MAIL DATE	DELIVERY MODE			
07/06/2009	PAPER			

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/723,118	Applicant(s) ORAN ET AL.
	Examiner KAN YUEN	Art Unit 2416

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 26 March 2009.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-8 and 10-20 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) 1-8 and 10 is/are allowed.

6) Claim(s) 11-20 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO-166/08)
 Paper No(s)/Mail Date _____

4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date _____

5) Notice of Informal Patent Application

6) Other: _____

Detailed Action

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after Advisory Action. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/26/2009 has been entered.

Response to Arguments

1. Applicant's arguments with respect to claims 1-8 and 10-20 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 11-14 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hepworth et al. (Pub No.: 2004/0073690) in view of Balakrishnan et al. (Pub No.: 2005/0036519).

5. **For claim 11**, Hepworth et al. disclosed the network processing device for analyzing an Internet Protocol (IP) network, comprising:

a processor (fig. 1, agent 156) configured to send or receive one or more packets formatted as if the packets are carrying a media payload but the one or more packets containing no media payload (Hepworth et al. see paragraphs 0042-0044, fig. 2). The agent 156 in response to the detection can perform on or more of the steps 204, 208, and 212 as shown in fig. 2. In step 204, the agent 156 in the context-initiating endpoint sends test packets to the switch or server to one or more of the destination endpoints;

the packets formatted without the media payload (Hepworth et al. see paragraph 0044, fig. 2). Alternatively, test RTP/RTCP packets can be sent between the two endpoints to measure one or more of the bandwidth information noted above, such as jitter, packet delay, and packet loss. The packets would have a dummy payload and the packet headers would include information such as time stamps. Based on the broadest reasonable interpretation, the RTP/RTCP packets with dummy payload can be interpreted as the RTP payload packets that do not contain media payload. The format of the test packets is set forth in RFC 1889;

the processor further configured to send or receive a media stream according to transmission information associated with the packets (Hepworth et al. see paragraph 0044, fig. 2). A marker bit may be included in the test packets to notify the receiving endpoint that the packet is associated with an available bandwidth test. Thus, the marker bit may be the transmission information associated with the packets;

However, Hepworth et al. does not explicitly disclose the feature for inserting a time stamp into the packets that identifies a non-zero amount of simulated media time for media content in the media payload that is not actually encoded into the media payload of the packets.

Balakrishnan et al. from the same or similar fields of endeavor disclosed the feature for inserting a time stamp into the packets that identifies a non-zero amount of simulated media time for media content in the media payload that is not actually encoded into the media payload of the packets (Balakrishnan et al. see paragraph 0017). The PES packet header contains (inserts) a presentation time stamp in the header which indicates the time instants (non-zero amount of media time) at which the associated audio or video presentation frame of a given program should be decoded (not encoded) and presented to the user. Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the feature as taught by Balakrishnan et al. in the network of Hepworth et al. The motivation for using the feature being that it provides synchronization with the receiver so that transmission efficiency can be achieved.

Regarding claim 12, Hepworth et al. disclosed the feature wherein the processor is configured to send and/or receive the one or more packets during and within a media call signaling session, the media call signaling session establishing and setting up the media path that is then subsequently used for sending or receiving the media stream (Hepworth et al. see paragraphs 0040-0048, fig. 2).

Regarding claim 13, Hepworth et al. disclosed the feature wherein the processor is configured to generate a Real Time Control Protocol (RTCP) report using the transmission information associated with the packets (Hepworth et al. see paragraphs 0040-0048, fig. 2).

Regarding claim 14, Hepworth et al. disclosed the network processing device including a user interface configured to communicate with a device that initiates an IP network connection for transmitting the media stream (Hepworth et al. see paragraphs 0036-0037, fig. 1). Fig. 1, depicts a VoIP system 100 which includes plurality of endpoints 104-116 and a router 120;

Regarding claim 17, Hepworth et al. disclosed the feature wherein the processor is configured to send or receive the media stream according to the number of successfully transmitted packets and the jitter statistics for the packets (Hepworth et al. see paragraphs 0010-0021). When the collected bandwidth information (signaling) satisfies the predetermined threshold, the connection is established between the two endpoints. The bandwidth information includes one or more of the followings: received RTP packets, jitter buffer delay, jitter; packet loss burst sizes and etc.

6. Claims 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hepworth et al. (Pub No.: 2004/0073690) in view of Balakrishnan et al. (Pub No.: 2005/0036519) as applied to claim 11 above, and further in view of Teruhi et al. (Pub No.: 2003/0072269).

For claim 15, Hepworth et al. and Balakrishnan et al. both did not explicitly disclose the feature wherein the processor is configured to conduct a signaling session that notifies a receiver that the packets are going to be used for analyzing the IP network. Teruhi et al. from the same or similar fields of endeavor disclose the feature wherein the processor is configured to conduct a signaling session that notifies a receiver that the packets are going to be used for analyzing the IP network (Teruhi et al. fig. 10, paragraph 0062-0066).

Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the feature as taught by Teruhi et al. in the network of Hepworth et al. and Balakrishnan et al. The motivation for using the feature being that it can provide link or channel status quicker.

Regarding claim 16, Teruhi et al. disclosed the feature wherein the processor is configured to generate a marker bit in one of the packets that causes the receiver to send back the transmission information associated with the packets (Teruhi et al. fig. 3, paragraph 0045). In fig 3, The RTP packet comprises RTP header that has a marker bit M field. As shown in fig. 9, the destination node 12 receives multiple of RTP packets

along with the RTCP-SR from the source node 11, which caused the destination node 12 to transmit a RTCP-RR back to the source node 11.

7. Claims 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Teruhi et al. (Pub No.: 2003/0072269) in view of Hepworth et al. (Pub No.: 2004/0073690) and further in view of McDysan et al. (Pub No.: 2005/0117576).

For claim 18, Teruhi et al. disclosed the method for analyzing a media path in a packet switched network, comprising:

initiating a Real Time Protocol (RTP) signaling session for establishing a media path for transporting RTP payload packets that contain media payloads (Teruhi et al. see paragraphs 0043-0044, fig. 2). As shown in fig. 2, in a data delivery system using RTP as a transport protocol, connection are established between the source and destination nodes 11 and 12 via TCP channel 101 of RTSP and a UDP channel 102 of RTP. A control channel 103 by RTCP is used to control RTP data transmission, and it possesses a function of offering information on the quality of data delivery to an application as mentioned above;

setting a marker bit in one of the RTP payload packets formatted without media payloads and not containing any media payload that causes a receiver to send back a Real Time Control Protocol (RTCP) report that contains media path information for the send RTP payload packets; and sending a media stream to the receiver according to

Art Unit: 2416

the media path information in the RTCP report (Teruhi et al. fig. 3, paragraph 0045, 0054-0057, fig. 9). In fig 3, The RTP packet comprises RTP header that has a marker bit (flag) M field. As shown in fig. 9, the destination node 12 receives multiple of RTP packets along with the RTCP-SR from the source node 11, which caused the destination node 12 to transmit a RTCP-RR back to the source node 11. The RTCP-RR includes route quality information, the packet loss ratio, the RTP packet interarrival jitter, the timestamp for the immediately previously received RTCP-SR (see paragraph 0055). The source node 11 extracts the route quality information from the RTCP-RR received from the destination node, and based on the packet jitter, determines RTP packet ratio for the respective routes.

However, Teruhi et al. does not explicitly disclose the feature sending multiple RTP payload packets during and within the RTP signaling session that are formatted as if the RTP payload packets contain a media payload but the RTP payload packets formatted without media payloads and not containing any media payload; and marker bit (flag) in the packet causes a receiver to send back report.

Hepworth et al. from the same or similar fields of endeavor disclosed the feature for sending multiple RTP payload packets during and within the RTP signaling session that are formatted as if the RTP payload packets contain a media payload but the RTP payload packets formatted without media payloads and not containing any media payload (Hepworth et al. see paragraph 0044, fig. 2). Alternatively, test RTP/RTCP packets can be sent between the two endpoints to measure one or more of the bandwidth information noted above, such as jitter, packet delay, and packet loss. The

Art Unit: 2416

packets would have a dummy payload and the packet headers would include information such as time stamps. Based on the broadest reasonable interpretation, the RTP/RTCP packets with dummy payload can be interpreted as the RTP payload packets that do not contain media payload. A marker bit may be included in the test packets to notify the receiving endpoint that the packet is associated with an available bandwidth test. Thus, the marker bit (flag) may be the transmission information associated with the packets.

Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the feature as taught by Hepworth et al. in the network of Teruhix et al. The motivation for using the feature being that it increases transmission reliability by collecting link status information such as packet loss and delay.

McDysan et al. from the same or similar fields of endeavor disclosed the feature wherein the marker bit (flag) in the packet causes a receiver to send back report (McDysan et al. see paragraph 0086). Reporting interface 102 can be configured via a "set reporting flags" control message to enable or disable reporting of selected events by setting or resetting reporting flags corresponding to these events.

Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to replace the marker bit of the RTP packet as taught by Teruhix et al. with "set reporting flags" of the control packet as taught by McDysan et al. to cause the destination node to report back a RTCP-RR. The motivation for using the feature being that it provides system reliability by selectively command destination node.

Regarding claim 19, Hepworth et al. disclosed the method of receiving multiple RTP payload packets that contain no media payload; generating an RTCP report that includes media path information for the received RTP payload packets; sending the RTCP report when one of the RTP payload packets is received that has a set marker bit; and establishing a media stream according to the media path information in the RTCP report (Hepworth et al. see paragraphs 0044-0049, fig. 2). Alternatively, test RTP/RTCP packets can be sent between the two endpoints to measure one or more of the bandwidth information noted above, such as jitter, packet delay, and packet loss. The packets would have a dummy payload and the packet headers would include information such as time stamps. A marker bit or flag would be included in the exchanged packets to notify the receiving endpoint that the packet is associated with an available bandwidth test. The details to implement either of these examples will be readily appreciated by one of ordinary skill in the art who associated with the RSVP and/or RTP/RTCP protocols.

8. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Teruhi et al. (Pub No.: 2003/0072269) in view of Hepworth et al. (Pub No.: 2004/0073690) and McDysan et al. (Pub No.: 2005/0117576) as applied to claim 19 above, and further in view of Chu et al. (Pub No.: 2007/0286165).

For claim 20, Teruhi et al., Hepworth et al. and McDysan et al. all did not explicitly disclose the feature of including delaying ringing a phone used for receiving

the media stream until the RTCP report is received and indicates an acceptable media path for sending the media stream. Chu from the same or similar fields of endeavor disclosed the feature of including delaying ringing a phone used for receiving the media stream until the RTCP report is received and indicates an acceptable media path for sending the media stream (Chu see paragraphs 0036-0038, fig. 4). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the teaching of Chu et al. in the network of Teruhi et al., Hepworth et al. and McDysan et al. The motivation for using the feature being that it provides more reliable transmission.

Allowable Subject Matter

9. Claims 1-8 and 10 allowed. The prior art failed to disclose the feature for selectively completing or terminating the initial media call signaling session according to the information obtained from the transmission of the no-op media payload packet during the initial media call signaling session, successful completion of the initial media call signaling session enabling subsequent transmission or playing out of media packets containing media payloads over the media path; and for inserting a time stamp into the packets that identifies a non-zero amount of simulated media time for media content in the media payload that is not actually encoded into the media payload of the packets, as recited in claim 1.

Examiner's Note:

Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

In the case of amending the claimed invention, Applicant is respectfully requested to indicate the portion(s) of the specification which dictate(s) the structure relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KAN YUEN whose telephone number is (571)270-1413. The examiner can normally be reached on Monday-Friday 10:00a.m-3:00p.m EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky O. Ngo can be reached on 571-272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kan Yuen/
Examiner, Art Unit 2416

/Ricky Ngo/
Supervisory Patent Examiner, Art
Unit 2416

KY